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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of	:	Customer Number: 46320
	:	
Frank LEYMANN, et al.	:	Confirmation Number: 5078
	:	
Application No.: 10/042,799	:	Group Art Unit: 2457
	:	
Filed: January 9, 2002	:	Examiner: A. Gold
	:	

For: MANAGING A FAILURE TO ACCESS A DATABASE IN A COMPUTER SYSTEM

APPEAL BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed January 5, 2010, wherein Appellants appeal from the Examiner's rejection of claims 15-18.

I. REAL PARTY IN INTEREST

This application is assigned to IBM Corporation by assignment recorded on January 9, 2002, at Reel 012497, Frame 0053.

II. RELATED APPEALS AND INTERFERENCES

On September 24, 2008, a Decision on Appeal was rendered in the present Application, and on February 3, 2009, a Decision on Request for Rehearing was also rendered. Appellants are unaware of any other related appeals and interferences.

III. STATUS OF CLAIMS

Claims 15-18 are pending and two-times rejected in this Application. Claims 1-14 have been cancelled. It is from the multiple rejections of claims 15-18 that this Appeal is taken.

IV. STATUS OF AMENDMENTS

The claims have not been amended subsequent to the imposition of the Sixth Office Action dated October 5, 2009 (hereinafter the Sixth Office Action).

V. SUMMARY OF CLAIMED SUBJECT MATTER

1   Referring to Figure 2 and also to independent claim 15, a method of operating a computer

2   system is disclosed. The computer system comprises an application client 15, a first application

3   server 21 configured to process requests 30 of the application client 15, a second application

4   server 20 configured to process requests 30 of the application client 15 (page 5, lines 2-8), and a

5   database 16 (see Fig. 1) accessible by the first and second application servers 21, 20 (page 5,

6   lines 20-21). The first application server detects that the database 16 is not accessible by the first

7   application server (page 6, lines 17-18). In 30/31, the first application server 21 receives a

8   request from the application client 15 to the first application server 21 (page 7, lines 9-13). In

9   32, the first application server 21 forwards the request to the second application server 20 while

10   the database 16 is not accessible by the first application server 21 (page 7, lines 14-18). In 33,

11   the second application server 20 receives the request from the first application server 21 (page 7,

12   lines 19-20). In 33, the second application server 20 generates a response to the request (page 7,

13   lines 20-22). In 34, the second application 20 forwards the response to the first application

14   server 21 while the database 16 is not accessible by the first application server (page 7, lines 22-

1   25). In 35, the first application server 21 receives the response from the second application

2   server 20 (page 8, lines 1-3). In 36/37, the first application server 20 forwards the response to

3   the application client 15 (page 8, lines 3-9).

VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 15-18 were rejected under 35 U.S.C. § 103 for obviousness based upon Holmberg, U.S. Patent No. 6,247,141, in view of Appellants' Admitted Prior Art (hereinafter the Admitted Prior Art), Rizvi et al., U.S. Patent No. 6,490,610 (hereinafter Rizvi), Helmer et al., U.S. Patent No. 6,411,991 (hereinafter Helmer), and Thomas, U.S. Patent Publication No. 2002/0129013.

VII. ARGUMENT

<u>THE REJECTION OF CLAIMS 15-18 UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON HOLMBERG IN VIEW OF THE ADMITTED PRIOR ART, RIZVI, HELMER, AND THOMAS</u>

For convenience of the Honorable Board in addressing the rejections, claims 17 and 18 stand or fall together with dependent claim 16, and claim 15 stands or falls alone.

On October 10, 2007, the Patent Office issued the "Examination Guidelines for Determining Obviousness Under 35 U.S.C. 103 in View of the Supreme Court Decision in KSR International Co. v. Teleflex Inc.," 72 Fed. Reg. 57,526 (2007) (hereinafter the Examination Guidelines). Section III is entitled "Rationales To Support Rejections Under 35 U.S.C. 103." Within this section is the following quote from the Supreme Court: "rejections on obviousness grounds cannot be sustained by merely conclusory statements; instead there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR Int'l Co. v. Teleflex Inc., 127 S. Ct. 1727, 1741 (2007) (quoting In re Kahn, 441 F.3d 977, 988 (Fed. Cir. 2006)).

Referring to the first column on page 57,529 of the Examination Guidelines for Determining Obviousness, the following is a list of rationales that may be used to support a finding of obviousness under 35 U.S.C. § 103:

(A) Combining prior art elements according to known methods to yield predictable results;

(B) Simple substitution of one known element for another to obtain predictable results;

(C) Use of known technique to improve similar devices (methods, or products) in the same way;

(D) Applying a known technique to a known device (method, or product) ready for improvement to yield predictable results;

(E) "Obvious to try" - choosing from a finite number of identified, predictable solutions, with a reasonable expectation of success;

(F) Known work in one field of endeavor may prompt variations of it for use in either the same field or a different one based on design incentives or other market forces if the variations would have been predictable to one of ordinary skill in the art;

(G) Some teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill to modify the prior art reference or to combine prior art reference teachings to arrive at the claimed invention.

Upon reviewing the Examiner's analysis on pages 4 and 5 of the Fifth and Sixth Office Actions, the Examiner appears to be employing rationale (G). However, the Examiner's analysis is not entirely clear as to what rationale the Examiner is employing. Appellants, therefore, request that the Examiner clearly identify the rationale, as described in the Examination Guidelines for Determining Obviousness, being employed by the Examiner in rejecting the claims under 35 U.S.C. § 103.

Referring again to rationale (G), as discussed on page 57,534 of the Examination Guidelines for Determining Obviousness, the following findings of fact must be articulated by the Examiner:

(1) a finding that there was some teaching, suggestion, or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings;

(2) a finding that there was reasonable expectation of success; and

(3) whatever additional findings based on the Graham factual inquiries may be necessary, in view of the facts of the case under consideration, to explain a conclusion of obviousness.

Referring to the paragraph entitled "Office Personnel as Factfinders" on page 57,527 of the Examination guidelines, the following was stated:

> Office personnel fulfill the critical role of factfinder when resolving the *Graham* inquiries. It must be remembered that while the ultimate determination of obviousness is a legal conclusion, the underlying *Graham* inquiries are factual. When making an obviousness rejection, Office personnel must therefore ensure that the written record includes findings of fact concerning the state of the art and the teachings of the references applied. In certain circumstances, it may also be important to include explicit findings as to how a person of ordinary skill would have understood prior art teachings, or what a person of ordinary skill would have known or could have done. Factual findings made by Office personnel are the necessary underpinnings to establish obviousness.

In <u>Graham v. John Deere Co.</u>, 383 U.S. 1, 148 USPQ 459 (1966), the Supreme Court set forth the factual inquiries that are to be applied when establishing a background for determining obviousness under 35 U.S.C. 103. These factual inquiries are summarized as follows:

(A) Determine the scope and content of the prior art;

(B) Ascertain the differences between the prior art and the claims at issue;

(C) Resolve the level of ordinary skill in the pertinent art; and

(D) Evaluate any indicia of nonobviousness.

However, in order to make a proper comparison between the claimed invention and the prior art, the language of the claims must first be properly construed. <u>See</u> <u>In re Paulsen</u>, 30 F.3d 1475,

6

1479 (Fed. Cir. 1994). See also, Panduit Corp. v. Dennison Mfg. Co., 810 F.2d 1561, 1567-68

(Fed. Cir. 1987) (In making a patentability determination, analysis must begin with the question,

"what is the invention claimed?" since "[c]laim interpretation, ... will normally control the

remainder of the decisional process.") See Gechter v. Davidson, 116 F.3d 1454, 1460 (Fed. Cir.

1997) (requiring explicit claim construction as to any terms in dispute).

Holmberg – the Examiner's analysis in the Fifth Office Action

Independent claim 15, in part, recites the following limitations:

> receiving, by the second application server, the request from the first application server;
>
> generating, by the second application server, a response to the request;
>
> forwarding, by the second application, the response to the first application server;
>
> receiving, by the first application server, the response from the second application server; and
>
> forwarding, by the first application server, the response to the application client.

Regarding all of the above-reproduced limitations, the Examiner merely cited to column 3, lines

5-22 of Holmberg, which for ease of reference, is reproduced below:

> FIG. 1 is a block diagram that illustrates the use of redundant servers in a client-server application. In particular, a plurality of client applications, C, are shown. A primary server, S 101, runs on a first processor 103. A second processor 105, which is separate from the first processor 103, runs a backup server, S' 107, in parallel with the primary server S 101. Overall, so that when one fails, the other can take over without any client application C noticing the problem, the primary server S 101 and the backup server S' 107 should have the same internal state at a virtual time, T, that occurs after processing any specific request from the client application C. (Since the backup server S' 107 trails the primary server S 101, the backup server S' 107 reaches the virtual time later in real time than the primary server S 101 does.) The existence of replicated server processes should not be visible to the client applications C using the server. In order to implement such a strategy, the following problems need to be solved:

1   <u>Appellants' response to the Examiner's characterization of Holmberg in the Fifth Office</u>

2   <u>Action</u>

3   The first of the above-reproduced phrases recites "receiving, by the second application

4 server, the request from the first application server." As readily apparent from viewing Figure 1,

5 which is the subject of column 3, lines 5-22, the requests are directed from client applications C

6 to either the primary sever S 101 or the backup sever S' 107. Additionally, there is no disclosure

7 of communication between the primary sever S 101 and the backup sever S' 107. Thus, despite

8 the Examiner's assertion to the contrary, Holmberg fails to teach that the second application

9 server (i.e., allegedly disclosed by backup server S' 107) receives a request from the first

10 application server (i.e., allegedly disclosed by primary server S 101).

11

12   The third and fourth of the above-reproduced phrases recite "forwarding, by the second

13 application, the response to the first application server" and "receiving, by the first application

14 server, the response from the second application server." As readily apparent from viewing

15 Figure 1, which is the subject of column 3, lines 5-22, the alleged second application server (i.e.,

16 backup server S' 107) forwards a response (i.e., allegedly disclosed by the reply) to the client

17 applications C. Additionally, there is no disclosure of communication between the primary sever

18 S 101 and the backup sever S' 107. Thus, despite the Examiner's assertion to the contrary,

19 Holmberg fails to teach either the second application server forwarding the response to the first

20 application server or the first application receiving the response from the second application

21 server.

22

23

1   Holmberg – the Examiner's analysis in the Sixth Office Action

2   Referring to the same limitations described above, the Examiner made certain

3   modifications to the Examiner's analysis. Specifically, with regard to the claimed "receiving, by

4   the second application server, the request from the first application server," the Examiner

5   asserted the following in the fifth full paragraph on page 3 of the Sixth Office Action:

6   sending a request to the second application server (col. 3, lines 5-22, Holmberg discloses
7   a backup server, running if there is a problem with the primary server, receiving the request
8   without the user knowing about the use of the backup server).
9
10   Thus, by the Examiner analysis, the Examiner has admitted that Holmberg fails to teach that the

11   second application server (i.e., allegedly disclosed by backup server S' 107) receives a request

12   from the first application server (i.e., allegedly disclosed by primary server S 101).

13

14   With regard to the claimed "forwarding, by the second application, the response to the

15   first application server" and "receiving, by the first application server, the response from the

16   second application server," the Examiner has now admitted that Holmberg fails to teach these

17   limitations.

18

19   The Examiner, however, <u>continues to mischaracterize</u> the scope and content of Holmberg

20   in the Sixth Office Action. The second and fifth of the above-reproduced phrases from claim 15

21   recite "generating, by the second application server, a response to the request" and "forwarding,

22   by the first application server, the response to the application client." Although the Examiner's

23   cited passage describes the alleged second application server (i.e., backup server S' 107)

24   generating a response, the alleged first application server (i.e., primary server S 101) does not

25   forward this same generated response to the alleged application client (i.e., client application C).

26   Instead, the alleged second application server forwards the reply it generated directly to alleged

1   application client, and the alleged first application server forwards the reply it generated directly

2   to alleged application client.

3

4   The above-reproduced arguments (incorporated herein) were previously presented on

5   page 7, lines 1-10 of the Request for Reconsideration filed September 8, 2009 (hereinafter the

6   Fifth Response). The Examiner, however, did not address these arguments in the Sixth Office

7   Action. Put differently, a proper claim construction of the claim terms at issue would recognize

8   that the claimed second application server generates a *response* to the request, and the claimed

9   first application server forwards the *same* *response* to the application client. On the contrary, the

10 *response* generated by the alleged second application server (i.e., backup server S' 107 of

11 Holmberg) is different from the *response* forwarded by the alleged first application server (i.e.,

12 primary server S 101) to the alleged application client (i.e., client application C).

13

14   Appellants, therefore, respectfully submit that the Examiner has committed error by

15 improperly determining the scope and content of the prior art, which is one of the Graham

16 factual inquiries. Additionally, since the Examiner has failed to recognize that Holmberg does

17 not teach all the limitations for which the Examiner is relying upon Holmberg to teach, the

18 Examiner has also committed error by failing to properly ascertain the differences between the

19 prior art and the claims at issue, which is another one of the Graham factual inquiries. Thus, the

20 Examiner has not set forth a proper prima facie of obviousness.

21

22 _____

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1   Admitted Prior Art – the Examiner's analysis in the Fifth Office Action

2   In the first and second full paragraphs on page 4 of the Fifth Office Action, the Examiner

3 asserted the following:

4   Holmberg fails to teach the limitation further including detecting by the first application
5 server that a database is not accessible.
6   However, AAPA teaches the use of an application server informing the application client
7 about the loss of a connection to a database, which must be happen after the application server
8 detects the loss of the connection (page 1, paragraph 2).
9

10   Appellants' response to the Examiner's characterization of the Admitted Prior Art in the

11 Fifth Office Action

12   Appellants respectfully disagree with the Examiner's analysis. For ease of reference, the

13 first two paragraphs on page 1 of Appellants' disclosure is reproduced below:

14   The invention relates to a method of operating a computer system, wherein said computer
15 system comprises at least one application client, at least two application servers which are suitable
16 to process requests of the application clients, and a database which may be accessed by the two
17 application servers. The invention also relates to a corresponding computer program or computer
18 program product as well as to a corresponding computer system.
19   If e.g. the first one of the two application servers has no connection anymore to the
20 database, or if e.g. the database management system of the first application server has an abnormal
21 termination, i.e. if the first application server fails to access the database, then, in prior art
22 computer systems, the application client is informed by the failing application server about the
23 loss of connection to the database. Then, the application client may select e.g. the second
24 application server in order to have this application server process the request of the application
25 client.
26

27   As readily apparent from reading these two paragraphs in combination, the second

28 paragraph refers to the second paragraph. For example, the second paragraphs refers to "the first

29 one of the two application servers" (emphasis added), while the first paragraph introduces the

30 concept of two application servers. Thus, the first and second paragraphs are discussing the

31 same thing, and as described in paragraph one, this "same thing" involves Appellants' inventive

32 concept. Thus, paragraph 2 on page 1 of Appellants' specification is not Admitted Prior Art, as

33 alleged by the Examiner.

1

2   In contrast, the paragraph spanning pages 2 and 3 and the first two full paragraphs on

3   page 3 of Appellants' specification refers to the prior art. Therefore, the Examiner has

4   committed legal error by asserting that Appellants have admitted that the teachings found in the

5   second paragraph on page 1 of Appellants' disclosure is prior art.

6

7   <u>Admitted Prior Art – the Examiner's analysis in the Sixth Office Action</u>

8   Referring to the first two paragraphs on page 4 of the Sixth Office Action, the Examiner

9   asserted the following:

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> Holmberg fails to teach the limitation further including detecting by the first application server that a database is not accessible.
> However, AAPA teaches the use of, <u>in prior art computer systems</u>, an application server informing the application client about the loss of a connection to a database, which must be happen after the application server detects the loss of the connection (page 1, paragraph 2). (emphasis in original)

17   In comparing the Examiner's analysis in the Fifth Office Action to the Examiner's analysis in the

18   Sixth Office Action, the only difference is the addition of the phrase, in underline, of "in prior art

19   computing systems." Apparently, the Examiner believes that a conclusory statement

20   unsupported by substantial evidence can be transformed into a proper finding of fact through use

21   of this additional phrase and underlining. For reasons already discussed above, the Examiner has

22   improperly characterized the scope and content of the Admitted Prior Art, which is one of the

23   <u>Graham</u> factual inquiries.

24

25   <u>Admitted Prior Art – the Examiner's obviousness analysis in the Sixth Office Action</u>

26   In the third full paragraph on page 4 of the Sixth Office Action, the Examiner presented

27   the following obviousness analysis regarding the combination of Holmberg and the Admitted

28   Prior Art:

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Holmberg in view of AAPA to detect, by the first application server, that a database is not accessible. One would be motivated to do so because it would be more efficient for a server to detect that a database is not accessible by it than to use a separate means for that function. (emphasis added)

Referring to the underlined portion of the above-reproduced passage, Appellants respectfully submit that the Examiner alleged motivation is entirely based upon speculation and not substantial evidence. Not only is the Examiner's alleged motivation for the combination factually unsupported, the Examiner has failed to articulated a reasoning, with some rational underpinning, to support the Examiner's conclusion of obviousness.

The Examiner's analysis begs the question as to why would Holmberg be concerned if the database is not accessible? Holmberg does not teach the use of a database accessible by first and second application servers. As such, Appellants are unclear as to why one having ordinary skill in the art at the time of the invention, while following the teachings of Holmberg, would be concerned about the ability to access a database.

Rizvi

In the fourth and fifth full paragraphs on page 4 of both the Fifth and Sixth Office Actions, the Examiner asserted the following:

Holmberg also fails to teach the limitation further including the use of a second application server when the first application server is not being able to access a database.
However, Rizvi teaches a method and apparatus for implementing an automatic failover mechanism for clients accessing a resource through a server (see abstract). Rizvi teaches the use of an automatic failover system (col. 3, line 33 — col. 4, line 20).

1   The secondary reference of Rizvi does not cure the above-identified deficiency of

2   Holmberg. Instead, when a failure occurs, Rizvi teaches that a client driver interface 204 detects

3   the failure of a database session 218 (column 4, lines 33-51). Upon the failure being detected, an

4   "automatic failover" occurs (column 4, lines 52-53), in which "a new database session [is

5   created] by reconnecting the client to an active database server" (column 3, lines 33-53; column

6   4, line 66 though column 5, line 3).

7

8   In both Holmberg and Rizvi, a new primary server (Holmberg) or new database server

9   (Rizvi) is selected in place of the original server, and after failure, the client communicates with

10   the new server ("[t]he backup server S' 107 takes over execution … and starts receiving requests

11   from the clients C," column 6, lines 41-43 of Holmberg)("client driver interface 204

12   automatically connects to database server 210 creating database session 220," column 5, lines 4-

13   11 of Rizvi; "[w]hen session 218 fails, database server 206 then switches to database connection

14   220," column 5, lines 57-59 of Rizvi). Thus, the applied prior art teaches that the alleged client

15   application connects directly with the server that generates the response to the request. In

16   contrast, as recited in claim 15, the second application server (which generates the response)

17   receives the request from the first application server and not directly from the client.

18

19   Despite the aforementioned arguments (incorporated herein) being substantially

20   previously presented on page 10, lines 1-25 of the Fifth Response, the Examiner did not address

21   these arguments in the Sixth Office Action.

22

23   _____

1   Helmer – the Examiner's analysis in the Fifth Office Action

2   In the first and second full paragraphs on page 5 of the Fifth Office Action, the Examiner

3   asserted the following:

4   Holmberg also fails to teach the limitation further including sending a request from the
5   first application server to the second application server.
6   However, Helmer teaches a geographic data replication system and method for a network
7   (see abstract). Helmer teaches the use of a failed server routing requests to a remote server for
8   processing (col. 2, lines 2-15, 46-59).
9

10   Appellants' response to the Examiner's characterization of Helmer in the Fifth Office

11   Action

12   The Examiner's analysis is inconsistent with the Examiner's prior statement in the Fifth

13   Office Action that column 3, lines 5-22 of Holmberg teaches "receiving, by the second

14   application server, the request from the first application server." Since, as admitted by the

15   Examiner, Holmberg fails to teach "sending a request from the first application server to the

16   second application server," Holmberg cannot then teach "receiving, by the second application

17   server, the request from the first application server," as previously alleged by the Examiner.

18

19   For ease of reference, the Examiner's cited passages of column 2, lines 2-15 and 46-59 of

20   Helmer are reproduced below:

21   The present invention is directed to a geographic data replication system and method.
22   According to one feature of the invention, temporary data for a local server is replicated
23   periodically to a remote server. According to a second feature, the temporary data for the remote
24   server is replicated to the local server. Replication includes copying temporary data to file servers
25   associated with the local and remote servers. Advantageously, an architecture according to the
26   present invention allows for about 100% service availability. If a server fails, such as the local
27   server, the remote server begins processing user requests based on the temporary data it received
28   from the local server. Failure of a server may not result in failure of services or loss of previously
29   generated temporary data.
30   Referring to FIGS. 1-3, embodiments of a system and associated methods for replicating
31   temporary data are shown. The temporary data associated with at least two geographically remote
32   servers is replicated between the servers. If a server generates temporary data associated with a
33   user, such as identifying selected shopping items, the temporary data is replicated to a remote
34   server. If the local server fails, the user request is routed to the remote server. The remote server
35   processes the request with the benefit of the previously generated temporary data. Temporary data,

such as data identifying the selected shopping items, is applied by the remote server without
repetitive user input or processing. Therefore, about 100% service availability is provided.
(emphasis added)

Referring to the above-reproduced passages, nowhere do these cited passages describe

that the Helmer teaches "sending a request from the first application server to the second

application server," as claimed. At best, Helmer teaches "sending a request ... to the second

application server." Thus, the Examiner has committed error by failing to properly ascertain the

differences between the applied prior art and the claims at issue, which is one of the <u>Graham</u>

factual inquiries.

<u>Helmer – the Examiner's analysis in the Sixth Office Action</u>

In response to Appellants' arguments, the Examiner made certain modifications to the

Examiner's analysis. Specifically, in the first and second full paragraphs on page 5 of the Sixth

Office Action, the Examiner asserted the following:

Holmberg also fails to teach the limitation further including sending a request from the
first application server to the second application server and receiving, by the second application
server, the request from the first application server.
However, Helmer teaches a geographic data replication system and method for a network
(see abstract). Helmer teaches the use of a failed server routing requests to a remote server for
processing (col. 2, lines 2-15, 46-59).

Although the Examiner has addressed the previously-identified inconsistency in the

Examiner's prior analysis within the Fifth Office Action, Appellants maintain that column 2,

lines 2-15 and 46-59 of Helmer does not teach "sending a request from the first application

server to the second application server" and "receiving, by the second application server, the

request from the first application server," as claimed. At best, Helmer teaches "sending a request

... to the second application server" and "receiving, by the second application server, the

1 request." Thus, the Examiner has committed error by failing to properly ascertain the differences

2 between Helmer and the claims at issue, which is one of the <u>Graham</u> factual inquiries.

3

4 <u>Helmer – the Examiner's obviousness analysis in the Fifth Office Action</u>

5   The Examiner's obviousness analysis regarding the Helmer is found in the third full

6 paragraph on page 5 of the Fifth Office Action and is reproduced below:

7   It would have been obvious to one of ordinary skill in the art at the time of the invention
8   to modify Holmberg in view of Helmer to send a request from the first application server to the
9   second application server. One would be motivated to do so because it would be a faster and more
10   efficient backup for the server to forward the data to the backup server.
11

12 <u>Appellants' response to the Examiner's obviousness analysis</u>

13   Appellants respectfully disagree with the Examiner's analysis. The Examiner's alleged

14 rationale for the motivation (i.e., "it would be a faster and more efficient backup for the server to

15 forward the data to the backup server") is <u>independent</u> of the proposed modification. The

16 Examiner's asserted benefit is a result of temporary data, which is generated by a local server,

17 being replicated in a remote server. As described in column 2, lines 52-55, if the local server

18 fails, the remote server processes the request with the benefit of the previously generated

19 temporary data. This proposed benefit is <u>independent</u> as to what entity sends the request to the

20 second application server (i.e., allegedly disclosed by the remote server) since the identity of the

21 entity does not affect how the proposed benefit is realized. Therefore, the Examiner has failed to

22 articulated a reasoning <u>with some rational underpinning</u> to support the Examiner's legal

23 conclusion of obviousness.

24

25

1   Helmer – the Examiner's obviousness analysis in the Sixth Office Action

2   The Examiner's obviousness analysis regarding the Helmer is found in the third full

3   paragraph on page 5 of the Sixth Office Action and is reproduced below:

4   It would have been obvious to one of ordinary skill in the art at the time of the invention
5   to modify Holmberg in view of Helmer to send a request from the first application server to the
6   second application server and to receive, by the second application server, the request from the
7   first application server. One would be motivated to do so because it would be a faster and more
8   efficient backup for the server to forward the data to the backup server.
9

10   As readily apparent from comparing the Examiner's obviousness analysis in the Sixth

11   Office Action to the Examiner's obviousness analysis in the Fifth Office Action, the Examiner

12   has relied upon the same motivation (i.e., "motivated to do so because it would be a faster and

13   more efficient backup for the server to forward the data to the backup server"). Thus, the

14   Examiner has failed to address Appellants' above-reproduced arguments (incorporated herein)

15   which were originally presented on page 12, line 18 through page 13, line 2 of the Fifth

16   Response.

17

18   _____

19   Thomas – the Examiner's analysis in the Sixth Office Action

20   The Examiner newly cited Thomas in the Sixth Office Action and asserted the following

21   in the fourth and fifth full paragraphs on page 5 and in the paragraph spanning pages 5 and 6:

22   Holmberg further fails to teach the limitation further including forwarding, by the second
23   application, the response to the first application server and receiving, by the first application
24   server, the response from the second application server.
25   However, Thomas teaches method and system for monitoring domain name registrations
26   (see abstract). Thomas teaches the use data forwarded from a server to a primary server (paragraph
27   37).
28   It would have been obvious to one of ordinary skill in the art at the time of the invention
29   to modify Holmberg in view of Thomas to forward, by the second application, the response to the
30   first application server and receive, by the first application server, the response from the second
31   application server. One would be motivated to do so because it allows for data to be sent to a user
32   through the primary server.
33

18

1   The Examiner's analysis suffers from several problems.

2

3   First, the Examiner's alleged motivation is factually incorrect. Paragraph [0037] of

4   Thomas describes data being sent to a user from a primary server through an agent server.

5   Second, the Examiner's alleged motivation is not a motivation. Instead, the Examiner's alleged

6   motivation simply describes a feature of Thomas without explaining why this feature would be

7   considered, by one having ordinary skill in the art at the time of the invention, as worthy of being

8   incorporated into the teachings of Helmer et al.

9

10   The deficiencies in the Examiner's analysis are exacerbated since Thomas is nonanalogous

11   prior art that cannot be properly applied against the claimed invention. Whether a prior art

12   reference is from a nonanalogous art involves (a) determining whether the reference is within the

13   same field of endeavor and (b) determining whether the reference is reasonably pertinent to a

14   known problem in the art. In re Clay, 23 USPQ2d 1058 (Fed Cir. 1992). If the prior art is

15   outside the inventor's field of endeavor, the inventor will only be presumed to have knowledge of

16   prior art that is reasonably pertinent to a known need or problem in the field of endeavor. KSR

17   International Co. v. Teleflex Inc., 550 U.S. 398, ___, 82 USPQ2d 1385, 1397 (2007). The

18   Examiner is also charged to consider "'the reality of the circumstances' ... in other words,

19   common sense" to determine what field a person of ordinary skill in the art would reasonably be

20   expected to look. In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992).

21

22   The field of the endeavor involves responding to requests using a database, and more

23   specifically, to how to handle responding to these requests when an application server is unable

1   to access the database. On the contrary, Thomas involves the field of on-line forms (and the

2   completion thereof). More specifically, Thomas relates to the on-line registration of domain

3   names. As such, Thomas is not within the same field of endeavor.

4

5   Additionally, the Examiner has failed to establish that Thomas is reasonably pertinent to

6   a known need or problem in the field of endeavor. Referring to paragraph [0038], Thomas states

7   the following:

8   In this arrangement, the agent server is acting as an intermediary between the user and the
9   primary server. The agent server can assist the user in accessing information from the primary
10   server or submitting information to the primary server. Although the agent processing 120 is
11   useful in many situations, one particular situation in which the agent processing 120 is particularly
12   useful is for on-line registrations or electronic filings. FIGS. 2A and 2B pertain to an embodiment
13   of the invention concerning electronic filings.
14

15   The particular benefit that Thomas attributes to the communication between the agent

16   server (i.e., allegedly corresponding to the claimed first application server) and the primary

17   server (i.e., allegedly corresponding to the claimed second application server) is that usefulness

18   of the agent server for on-line registration or electronic filings that will subsequently be

19   submitted to the primary server for processing. This benefit is not reasonably pertinent to a

20   known need or problem in the field of endeavor. The field of endeavor involves a second server

21   performing as a replacement/backup to a first server. By comparison, the agent and primary

22   servers of Thomas work, *in conjunction*, to perform a certain function.

23

24   Moreover, *assuming arguendo*, that the Examiner can establish that there is a need in the

25   field of endeavor for on-line registration/electronic filings, the obvious combination of Thomas

26   and the applied prior art would not result in the claimed invention. To obtain the benefits of

27   Thomas, both the agent and primary servers are needed to be operational. Thus, neither the

1   agent nor the primary server of Thomas can act as a replacement/backup server to the other as

2   contemplated by Holmberg, Rizvi, and Helmer. Instead, the obvious combination of Thomas

3   and the applied prior art would replace a single server of the applied prior art with both the agent

4   and primary servers of Thomas.

5

6   _____

7   <u>"while the database is not accessible by the first application server"</u>

8   Independent claim 15, in part, recites the following combination of limitations:

9   forwarding, by the first application server, the request to the second
10   application server <u>while the database is not accessible by the first application</u>
11   <u>server</u>

12   …

13   forwarding, by the second application, the response to the first application
14   server <u>while the database is not accessible by the first application server;</u>

15

16   Thus, when considered as a whole, the claimed invention performs at least two steps while the

17   database is not accessible by the first application server. First, the request is forwarded by the

18   first application server to the second application server. Second, the response to the request is

19   forwarded by the second application server back to the first application. As subsequently

20   claimed, the response is then forwarded, by the first application server, to the client.

21

22   The Examiner's analysis is almost entirely silent as to the limitations of "while the

23   database is not accessible by the first application server." With regard to these limitations, the

24   Examiner relied upon the Admitted Prior Art. However, even assuming, for sake of argument,

25   that the Examiner's characterization of the Admitted Prior Art is correct, the Admitted Prior Art

1   can only be treated as teaching recognizing that a database may not be accessible by an

2   application server. Absent from these alleged teachings is a discussion of what steps are to be

3   taken "while the database is not accessible by the first application server."

4

5   Turning to the Examiner's analysis, the Examiner <u>has failed to allege</u> that it would have

6   been obvious to perform the two forwarding steps reproduced above while the database is not

7   accessible by the first application server. As such, even at a most basic level, the Examiner has

8   failed to set forth a prima facie case of obviousness. Appellants can only guess as to why the

9   Examiner has omitted an analysis as to these limitations. However, with the exception of the

10   Examiner's allegations as to the teachings of the Admitted Prior Art, the Examiner has not

11   identified where any of the four cited references teach (i) a database not being accessible by a

12   first application server and (ii) performing certain steps when this particular condition precedent

13   occurs. As such, the Examiner cannot tie the condition precedent (i.e., "while the database is not

14   accessible by the first application server') with the steps to be performed upon the condition

15   precedent being met.

16

17   <u>Claims 16 and 18</u>

18   Both dependent claims 16 and 18 recites "the response is received, from the second

19   application server, into [a] queue of the first application server." With regard to these

20   limitations, the Examiner cited column 6, lines 10-18 and 29-40 of Holmberg. However,

21   referring to the fourth full paragraph on page 5 of the Sixth Office Action, the Examiner admits

22   that "Holmberg fails to teach ... receiving, by the first application server, the response from the

23   second application server." Thus, by the Examiner's own admission, Holmberg fails to teach the

1   limitations recited in claims 16 and 18. Otherwise, if Holmberg did teach the above-reproduced

2   limitations found in claims 16 and 18, the Examiner would not have needed the newly cited

3   reference of Thomas, and the Examiner could have made the present rejection final.

4

5   <u>Conclusion</u>

6   Based upon the foregoing, Appellants respectfully submit that the Examiner's rejections

7   under 35 U.S.C. § 103 based upon the applied prior art is not viable. Appellants, therefore,

8   respectfully solicit the Honorable Board to reverse the Examiner's rejections under 35 U.S.C. § 103.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due under 37 C.F.R. §§ 1.17, 41.20, and in connection with the filing of this paper, including extension of time fees, to Deposit Account 09-0461, and please credit any excess fees to such deposit account.

Date: January 5, 2010   Respectfully submitted,

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VIII. CLAIMS APPENDIX

15. A method of operating a computer system, wherein the computer system comprises an application client, a first application server configured to process requests of the application client, a second application server configured to process requests of the application client, and a database accessible by the first and second application servers, the method comprising:

detecting, by the first application server, that the database is not accessible by the first application server;

receiving, by the first application server, a request from the application client to the first application server;

forwarding, by the first application server, the request to the second application server; while the database is not accessible by the first application server

receiving, by the second application server, the request from the first application server;

generating, by the second application server, a response to the request;

forwarding, by the second application, the response to the first application server while the database is not accessible by the first application server;

receiving, by the first application server, the response from the second application server; and

forwarding, by the first application server, the response to the application client.

16. The method of claim 15, wherein

the response is received, from the second application server, into an input queue of the first application server.

17. The method of claim 16, further comprising

transferring the response from the input queue of the first application server to an output queue of the first application server.

18. The method of claim 15, wherein

the response is received, from the second application server, into an output queue of the first application server.

IX. EVIDENCE APPENDIX

No evidence submitted pursuant to 37 C.F.R. §§ 1.130, 1.131, or 1.132 of this title or of any other evidence entered by the Examiner has been relied upon by Appellants in this Appeal, and thus no evidence is attached hereto.

X. RELATED PROCEEDINGS APPENDIX

On September 24, 2008, a Decision on Appeal was rendered in the present Application, and on February 3, 2009, a Decision on Request for Rehearing was also rendered. A copy of both decisions are attached hereto. Appellants are unaware of any other related appeals and interferences.